AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-23. (Cancelled)

24. (New) A polyketone solution which comprises a polyketone containing a ketone unit represented by the following formula (1) as a main repeating unit and having a molecular weight distribution of 1-6 and a Pd content of not more than 50 ppm and a solvent for dissolving the polyketone and which has a phase separation temperature in the range of 0-150°C:

wherein the solvent for dissolving the polyketone is an aqueous solution containing zinc chloride and calcium chloride, the weight ratio of zinc chloride and calcium chloride is 29/71-44/56, and the total concentration of the zinc chloride and calcium chloride in the solution is 58-64% by weight.

25. (New) A polyketone solution which comprises a polyketone containing a ketone unit represented by the following formula (1) as a main repeating unit and having a molecular weight distribution of 1-6 and a Pd content of not more than 50 ppm and a solvent for dissolving the polyketone and which has a phase separation temperature in the range of 0-150°C:

wherein the solvent for dissolving the polyketone is an aqueous solution containing zinc chloride, calcium chloride and lithium chloride, the weight ratio of zinc chloride and the total of calcium chloride and lithium chloride is 29/71-44/56, the weight ratio of calcium chloride and lithium chloride is 49/51-91/9, and the total concentration of the zinc chloride, calcium chloride and lithium chloride in the solution is 58-64% by weight.

26. (New) A polyketone solution which comprises a polyketone containing a ketone unit represented by the following formula (1) as a main repeating unit and having a molecular weight distribution of 1-6 and a Pd content of not more than 50 ppm and a solvent for dissolving the polyketone and which has a phase separation temperature in the range of 0-150°C:

wherein the solvent for dissolving the polyketone is an aqueous solution containing zinc chloride, calcium chloride and calcium thiocyanate, the weight ratio of zinc chloride and the total of calcium chloride and calcium thiocyanate is 29/71-44/56, the weight ratio of calcium chloride and calcium thiocyanate is 76/24-99.5/0.5, and the total concentration of the zinc chloride, calcium chloride and calcium thiocyanate in the solution is 58-64% by weight.

27. (New) A polyketone solution which comprises a polyketone containing a ketone unit represented by the following formula (1) as a main repeating unit and having a molecular weight distribution of 1-6 and a Pd content of not more than 50 ppm and a

solvent for dissolving the polyketone and which has a phase separation temperature in the range of 0-150°C:

wherein the solvent for dissolving the polyketone is an aqueous solution containing zinc chloride and calcium thiocyanate, the weight ratio of zinc chloride and calcium thiocyanate is 32/68-49/51, and the total concentration of the zinc chloride and calcium thiocyanate in the solution is 57-65% by weight.

- 28. (New) A polyketone solution according to any one of claims 24-27, wherein the polyketone concentration is 1-40% by weight.
- 29. (New) A process for producing polyketone fibers which comprises heating the polyketone solution of any one of claims 24-27 to a temperature higher than the phase separation temperature, then extruding the polyketone solution into a coagulating bath having a temperature lower than the phase separation temperature to form a fibrous material, thereafter removing a part or the whole of the solvent which dissolves the polyketone from the fibrous material, stretching the fibrous material and winding up the resulting fibrous material.
- 30. (New) A process for producing polyketone fibers according to claim 29, wherein after completion of the stretching, the fibers are wound up at a tension of 0.005-0.5 cN/dtex.
- 31. (New) A process for producing polyketone fibers according to claim 29, wherein the fibers obtained after stretching are wound up at a tension of 0.005-0.5 cN/dtex after or while heat treating the fibers at 100-280°C.

- 32. (New) A process for producing polyketone fibers which comprises heating the polyketone solution of any one of claims 24-27 to a temperature higher than the phase separation temperature, then extruding the polyketone solution into a coagulating bath having a temperature lower than the phase separation temperature to form a fibrous material, thereafter drawing the fibrous material out of the coagulating bath at a coagulation draft of 0.2-2, successively drying the fibrous material at a drying draft of 0.5-1.5 after or while removing a part or the whole of the solvent which dissolves the polyketone from the fibrous material, stretching the fibrous material and winding up the resulting fibrous material.
- 33. (New) A process for producing polyketone fibers according to claim 32, wherein after completion of the stretching, the fibers are wound up at a tension of 0.005-0.5 cN/dtex.
- 34. (New) A process for producing polyketone fibers according to claim 32, wherein the fibers obtained after stretching are wound up at a tension of 0.005-0.5 cN/dtex after or while heat treating the fibers at 100-280°C.